

REMARKS

The Examiner is thanked for the due consideration given the application.

Claims 1, 3-28 and 30-43 are pending in the application. Claims 2 and 29 have been canceled by this amendment. Claim 1 has been amended to generally incorporate the subject matter of claim 2. Claim 28 has been amended to generally incorporate the subject matter of claim 29, and the amendments to claim 28 also find support at page 10, lines 20-21 and page 13, lines 14-15 of the specification. Claim 30 has been amended to not depend on a canceled claim. Other claim amendments improve the language in a non-narrowing fashion.

No new matter is believed to be added to the application by this amendment.

Rejections Based On Sandberg

Claims 1-21, 25, 27-33, 35-38, 40, 41 and 43 have been rejected under 35 USC §103(a) as being unpatentable over Sandberg (WO 96/29667) in view of Salste (WO 01/28154). Claims 22-24, 26, 34, 38 and 42 have been rejected under 35 USC §103(a) as being unpatentable over Sandberg in view of Salste, and further in view of Nagel (U.S. Patent 7,181,017). These rejections are respectfully traversed.

The present invention pertains to securely transmitting confidential information and can be understood, by way of example, in Figure 1 of the application, reproduced below.

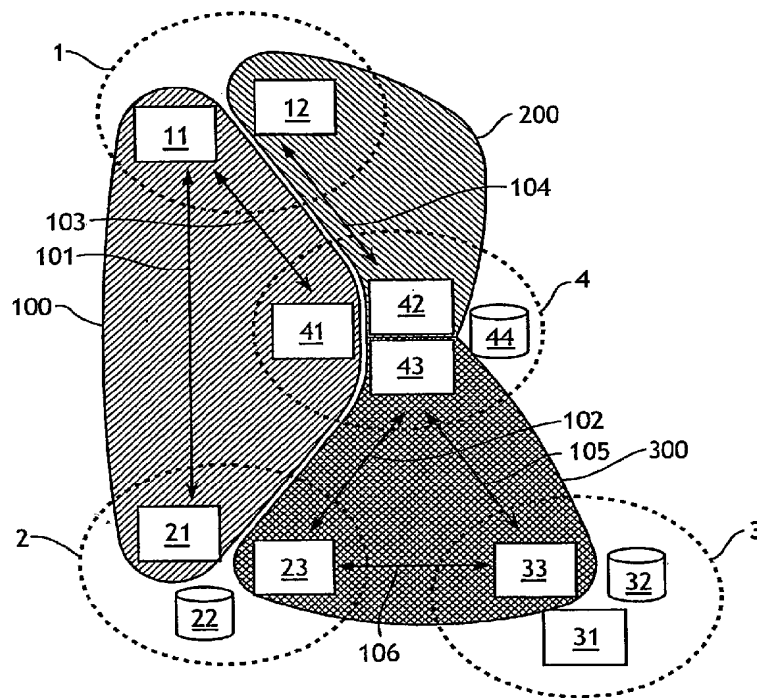


FIG. 1

As is set forth in instant claim 1, the present invention entails to transmission of an authenticating code to an authenticating organization (3) during a transaction with a user (1) according to which a first part of the confidential information is sent to the authenticating organization over a first network. This method includes a stage according to which the user (1) sends the second part of the confidential information, complementary to the first part, to a neutral intermediary (4) over a second network (200) disjointed from the first network, the two complementary parts being entered on disjointed terminals. The neutral intermediary (4) then sends to the authenticating organization (3), over a third network (300),

the complementary part of the confidential information which it has received, the neutral intermediary (4) having not access to all the confidential information, only the authenticating organization (3) retrieving all the confidential information.

Now consider Sandberg, Figure 2 of which is reproduced below.

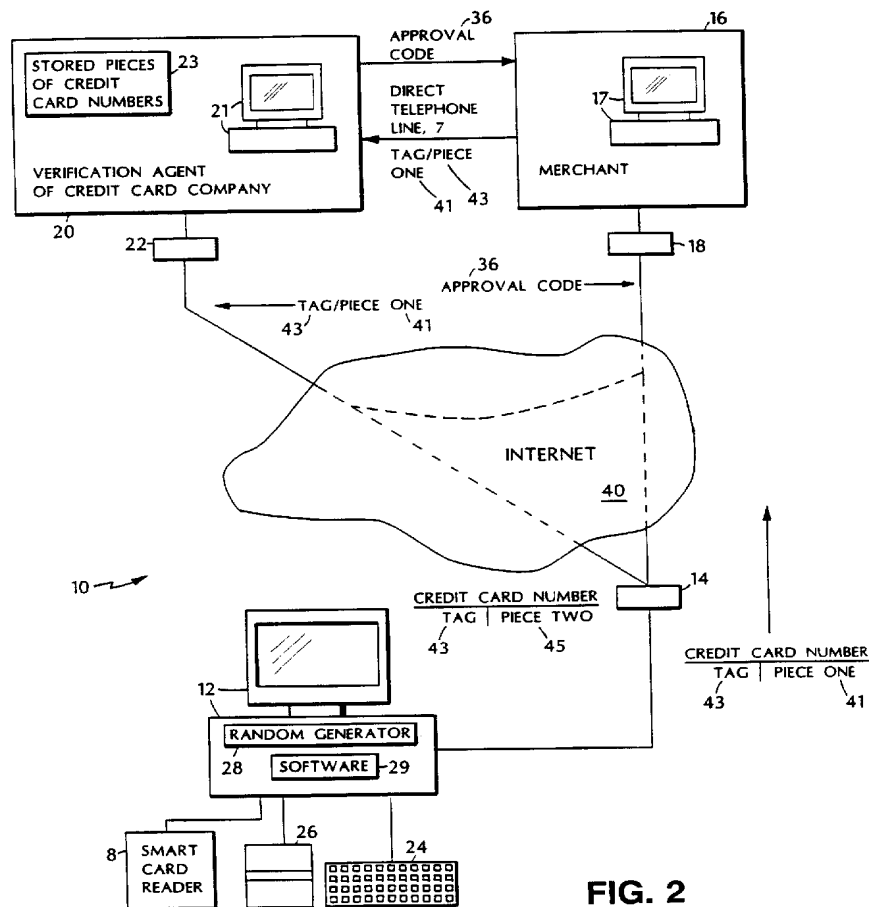


FIG. 2

Sandberg discloses (see Figure 2 above) a method for transmission of confidential information to an authenticating organization 20 during a transaction with a user according to which a first part 45 ("PIECE TWO") of the confidential information is sent to the authenticating organization 20 over the

Internet network 40, the user sending the second part 41 ("PIECE ONE") of the confidential information, complementary to the first part, to a neutral intermediary 16 over the Internet network 40, the two complementary parts being entered on only one terminal 12, the neutral intermediary 16 then sending to the authenticating organization 20 the complementary part 41 ("PIECE ONE") of the confidential information which it has received, the neutral intermediary 16 having not access to all the confidential information, only the authenticating organization 20 retrieving all the confidential information.

According to the Office Action, Sandberg does not teach a disjointed network (see item 7 page 3 of the Official Action dated May 7, 2009). The Applicant agrees. Both part of the confidential information are send over the Internet Network 40.

Furthermore, Sandberg does not teach entering the two complementary parts 45 ("PIECE TWO") and 41 ("PIECE ONE") on disjointed terminals. Both parts are entered on only one terminal 12. The credit card number is not split before being entered on the computer 12: the keyboard 24, the device 26 and the card reader 28 are not used to split the credit card number but are alternative means for reading the whole credit card number (see page 1 lines 10-15 of Sandberg), and the computer 12 splits the credit card number (see page 4 lines 34-35 of Sandberg).

Salste discloses (see Figure 1 of Salste, reproduced below) a method for transmission of confidential information to an authenticating organization 107 during a transaction with a user according to which the confidential information is sent to the authenticating organization 107 over a closed telecommunication PSTN network, the confidential information being entered on one terminal 101.

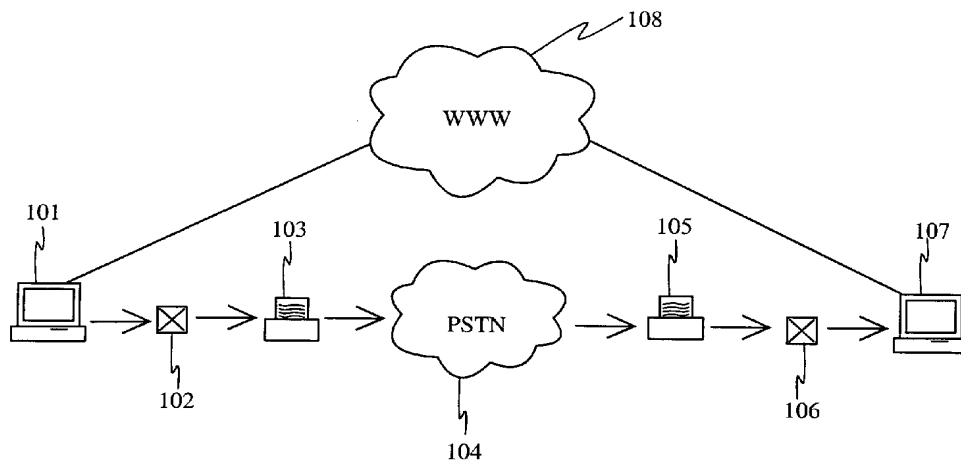


Fig. 1

The Applicant agrees with the Examiner in that Salste discloses that *"part of the information to be transmitted can be transmitted via an open telecommunication network and another part is transmitted via a closed telecommunication network"* (see the Abstract of Salste).

Nevertheless, Salste does not teach a disjointed network for sending confidential information, but clearly teaches that confidential information must be send only over a network 104 (closed telecommunication network, like telephone network), and that an other network 108 (open data network, like Internet) can

be used for sending information containing no confidential information (for example "what he wants to buy", see page 6 lines 12-13 of Salste):

- indeed, Salste discloses that "according to the invention, the information that is transmitted via the closed telecommunication network is confidential information" (next sentence of the previously cited sentence of the Abstract of Salste), "the objectives of the invention are achieved by an arrangement, by which confidential information is encoded and transmitted via a closed telecommunication network" (see page 3 lines 5-7 of Salste), "the sender transmits the confidential information to the receiver via the closed telecommunication network" (see page 3 lines 19-20 of Salste), "a central idea of the invention is to use a closed telecommunication network [...] for transmitting confidential information" (see page 4 lines 15-16 of Salste), "if again the information contains confidential information, the information is transmitted in a closed telecommunication network" (see page 6 lines 3-5 of Salste), "the confidential information [...] are transmitted from the sender to the receiver via a closed telecommunication network" (see claim 1, page 16 lines 10-12 of Salste), etc..., and

- Salste discloses that *"confidential information is not transmitted in the open data network"* (see page 4 lines 17-18 of Salste) *"telecommunications between two computers can be handled via an open data network, such as the Internet (WWW; World Wide Web) 108, when the data to be transmitted does not contain confidential information"* (page 5 lines 16-17 of Salste) , *"if the information does not contain confidential information, the information is transmitted from the sender to the receiver in an open data network"* (see page 6 lines 1-4 of Salste), etc...

Nagel discloses an *"intermediary"*. The intermediary according to Nagel has a technical function that differs from the intermediary according to the Application: according to Nagel, the intermediary is used for negotiating, between a user 20 and a database 30, a comprehension function for cryptographic problems (See abstract and Figure 1 of Nagel).

Thus, Sandberg or Salste or Nagel do not teach:

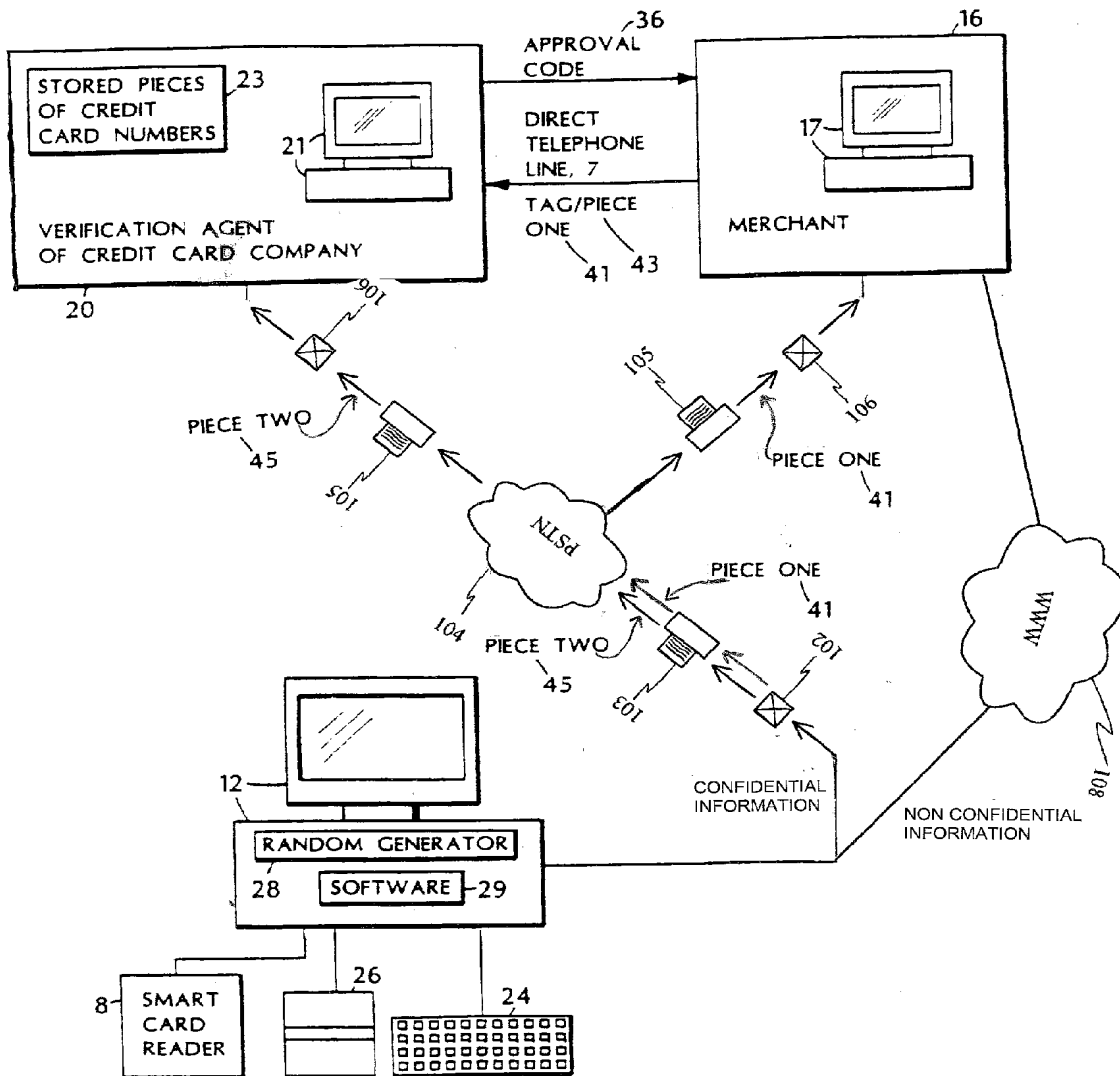
1) disjointed networks for transmitting two complementary parts of confidential information, or

2) disjointed terminals for entering respectively the two complementary parts of confidential information,

and thus any combination of Sandberg, Salste, and Nagel does not teach these two features.

One skilled in the art could modify Figure 2 of Sandberg in order to reduce the risk of an unauthorized party to gain access to the confidential information as taught by Salste: *"a central idea of the invention is to use a closed telecommunication network, such as a public switched telephone network, for transmitting confidential information. [...] because confidential information is not transmitted in the open data network, the risk of an unauthorized third party gaining access to the confidential information can be reduced"* (see page 4, lines 15-19 of Salste).

Thus, the one skilled in the art would modify Figure 2 of Sandberg as illustrated below by replacing the risky open data internet network 40 of Sandberg with a closed telecommunication network 104 like a PSTN network. The open data network 108 (like Internet) could be used to transmit non confidential information to the merchant 16, like what the user wants to buy (see page 6, lines 12-13 of Salste).



Thus, in the combination of Sandberg and Salste:

- 1) the two complementary parts 45 ("PIECE TWO") and 41 ("PIECE ONE") of the confidential information are not sent over two disjointed networks, but are send over one closed telecommunication network 104, and
- 2) the two complementary parts 45 ("PIECE TWO") and 41 ("PIECE ONE") of the confidential information are entered on the same computer terminal 12, the computer 12 splitting the

confidential information (see page 4 lines 34-35 of Sandberg), and the two parts of the confidential information being sent via the same fax machine 103.

According to the present invention, by using disjointed networks and disjointed terminals for two complementary parts of confidential information, the disjointed parts have generally no meaning when they are taken separately and thus cannot be reconstituted by a third party as they pass by different paths and are reconstituted only by the authenticator organization; the information sent over the disjointed networks is not reconcilable by a third party, and this makes pirating and eavesdropping of the communications worthless (see page 16 lines, 15-18 and page 18 lines 7-9 of the specification of the present application).

One of ordinary skill and creativity would thus fail to produce a claimed embodiment of the present invention from a knowledge of Sandberg and Salste (and Nagel). A *prima facie* case of unpatentability has thus not been made.

These rejections are believed to be overcome, and withdrawal thereof is respectfully requested.

Conclusion

As a conclusion, we believe the application to be allowable.

The Commissioner is hereby authorized in this, concurrent, and future submissions, to charge any deficiency or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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